



A Conceptual Review Of Mootrashmari , With Its Aetiological Factor , Management

* Dr Manpreet Kaur ** Dr Neha ***Dr Aasheesh Kumar

*Assistant Proffesor ,Department of Prasuti Tantra Evum Stree Roga

** Assistant Proffesor ,Ayurved Samhita Evum Siddhant

***Assistant Proffesor,Department of Kriya Sharir , Quadra Institute Of Ayurveda ,Roorkee,Haridwar,U.K.

Submitted: 01-10-2021

Revised: 12-10-2021

Accepted: 15-10-2021

ABSTRACT–

Ashmari is known to mankind since times age-old and it is one of the most mutual and distressing disease among the group of urinary disorder. As per classics,ashmari is encompassed in **ashtamahagada** due to its fatal nature. Mootrashmari is a disorder of mutravahasrotas. Description of ashmari is found in almost all Samhita of Ayurveda as etiopathogenesis , classification , symptomatology , complications and management in a most scientific manner , sex, metabolic disorders, hydration status, mineral content of water, nutritional deficiency , etc, for urinary stone formation. In modern view mutrashmari is urolithiasis and science also emphasizes on involvement of various factors like heredity, age. Mutrashmari – urolithiasis is a consequence of complex physico – chemical processes which involves sequence of events in the formation of any urinary stone i.e magnitude of imbalance between stone promoters and inhibitors in the kidney .Urolithiasis is the third most common affliction of the urinary tract , after urinary tract infection and benign prostatic hypertrophy. Management of urolithiasis in modern science is mainly surgery and almost none oral medicine available for this purpose and other available management like cysstolithotomy, lithotripsy , extracorporeal shock wave etc. in ayurvedic classics have mentioned mutravarechaniya (diuretic) and ashmarighna dravya (lithotriptic)whice are beneficial for urolithiasis. Drugs mentioned which are commonaly used are gokshura, varuna ,pashanabheda , shilajit , yava kshara , etc.

Keywords –Ashmari ,Urolithiasis,Yava kshar, Diuretic ,lithotriptic, Mutral, Mootrashmari.

I. INTRODUCTION

Ayurveda contracts many disease of Mutravaha srotas as mutrakriccha , mutraghata , mutraashmari etc. Mutrashmari is one of the most common and upsetting maladies among urinary disorders. The disease mutrashmari is one among

of the mootravahasrotas and according to Sushruta, mootravahasrotas are two and their root is vasti and medra. Injury to these srotas leads to expansion of bladder , obstruction of urination and erection of penis. Whereas Acharya Charaka has mentioned basti and vankshana are their root.Vagbhatta supported the Charaka view, according to him abnormality to these srotas is accountable for voiding of too much of urine or complete suppression of urine , abnormal composition of urine , and occasional or frequent painful passage of thick urine .the disease mutrashmari is one among of the ashta – mahagadha (eight fatal conditions) formed in the urinary system¹. Based on its clinical features, it is compared to Urolithiasis. Urolithiasis is a consequence of multilayered physico-chemical process which involves sequence of events in the formation of any urinary stone . It is as follows urinary saturation super saturation nucleation crystal growth crystal aggregation crystal retention stone formation². The lifetime prevalence of symptomatic urolithiasis in approximately 10% in men , 5 % in women and the probability of second stone formation within 5-7 years is approximately 50%³.Ashmari are the structures like hard stone.⁴Tridoshaja vyadhi , kapha dosha takes important part in hardening the ashmari and vata , pitta dries up the mutra along with kapha⁵.

II. REVIEW OF LITERATURE-

Vedas are the oldest and foremost available texts in the world. There are four Vedas i.e. Rigveda, Samaveda, Yajurveda and Atharvaveda , Ayurveda , from the Vedic period description of ashmari is mentioned. In Atharvaveda also in Rigveda the method of removal of urinary stone is mentioned and instructed not to ride on horses and avoid jolting movements as much as possible to get relief from the pain. In samhita , Charaka samhita detailed description is founded in 7th Chapter of Sharirsthana , in 26th Chapter of Chikitsa Sasthan. In Sushruta Samhita in Nidana sthana and



Sharirasthana, Sushruta mentioned detailed of examination of and structure of mootravaha samsthana, and details of urinary calculus under the heading of ashmari with details of aetiology, classification, pathology, symptomatology and management. In Kashyapa Samhita, Sutrasthana chapter 25th i.e. Vedana Adhyaya and in chikitsasthana chapter 10th. Harita Samhita triteeya sthana, chapter 31st is consider with sign & symptoms of ashmari. In Ashtanga samgraha nidana sthana chapter 9 and chikitsasthana chapter 13, treatment of various types of ashmari has been mentioned. Madhava nidana in chapter 32, symptomatology, and classification of ashmari are mentioned. Sharangadhara has explained about the ashmari chikitsa in madhyama khanda by different types of preparation and compound drugs. In ashmari rog adhyaya, of Chakradatta few herbal preparations and combinations are mentioned. Lakshana, various types of herbal preparation for the management of ashmari and pathya-apathya have been described in chapter 36 of Bhaishajya Ratnavali. Yoga ratnakara nidana classification rupa and chikitsa of ashmari in 8th chapter of uttarakhanda.

Vyutpatti of Ashmari – The term ashmari is derived from the root ‘Ashu’ which has the meaning ‘Sanghata’. when ashu dhatu is suffixed by main as krit pratayaya it results. In the derivation of the term Ashmara. The streelinga

pratayaya added to Ashmara result in the formulation of the term Ashmari.

Nirukti of Ashmari– अश्मानराति

‘Ashmanam Rati Dadati Iti Ashmari’ The one which is converted into a hard mass resembling a stone (Ashma) is called Ashmari.

Paribhashaof Ashmari–

- **Ashmari Mutra Krichhra Syat** (Amarkosha)⁶
- **Asmari Mutra Krichhra Bheda** (Ayurvedic Shabdhakosha)
- **Ashmari**– Stone, Gravel, Strangely (Mr. Williams)
- By the consolidation of the vitiated Mutrain the mutravaha srotas a crystal resembling stone is termed as ashmari.
- Urolithiasis means Uro+Lithiasis; formation of stony concretions in the kidney, urinary tract or specifically bladder.

Nidanaof Ashmari–In ayurveda, main aetiology responsible for the formation of calculi is non – adoption of pancha – karma, unhealthy diet and lifestyle.

तत्रासंशोधनशीलस्यापथ्यकारिणः प्रकुपितः श्लेष्मामूत्रसम्पृक्तोऽनुप्रविश्य बस्तिमश्मरीं जनयति

Table no –1 Ashmari Nidana According to Different Acharyas

sr.no	Charak Samhita ⁷	Sushruta Samhita. ⁵	Madhav Nidan. ⁹	Yogratmakar	Chakradatta	Bhav Prakash
1	Ati vyayama	Ushna gamana	Snigdhaahara sevana	Atimaitihuna	Samashana	Atimaitihuna
2	Ruksha ahara	gamma gamana	Adhyasana	Ashwayana	Adhyashana	Ashwayana
3	Madya sevana	Adhwa gamana	Ajeema	Ativyayama	Sheethaahara	Ativyayama
4	Anupamamsa sevana	dheerga gamana	Madhura ahara	Ajeemabhojana	Snigdhaahara	Ajeemabhojana
5	Matsya sevana	Seetha,	Diwa swapna	Anupamatsya	Guru ahara	Anupamatsya
6	Adhyasana	snigdha, guru madhura ahara	Mutravegavar odha	Tikshanaoushadasevana	Madhura ahara	Tikshanaoushadasevana
7	Ajeema	Adhyashana		Rukshamadyapana	Tikshanaoushadasevana	Rukshamadyapana
8	Mutravegavardha	samashana				
9	Atimaitihuna	Diwa swapna				
10	Ashwayana	Apathyakaina				
11	Moothralaana pana	Asamsodhana seela				



TABLE NO -2AharajNidana of Ashmari –

Sr.no.	Nidana	Charak Samhita	Sushruta Samhita.	Astang Hridaya
1	Ajeerna bhojana	+	-	-
2	Apathya ahara sevana	-	+	-
3	Teekshna aushadha sevana	+	-	-
4	Ruksha madyapana	+	-	-
5	Anup mamsa sevana	+	-	-
6	Adhyashana	+	-	-

TABLE NO -3 Viharaj nidanaof Ashmari –

Sr.no.	Viharaj nidana	Charak Samhita	Sushruta Samhita.	Astang Hridaya	Madhav Nidan	Harit samhita
1	Asamshodhanasheelasya	-	+	-	-	-
2	Ativyayama	+	-	-	-	-
3	Ashva yana gamana	+	-	-	-	-
4	Mutravegavarodha	-	-	-	-	+

TABLE NO -4Beeja dushti janyanidanaof Ashmari –

Sr.no.	Beeja dushti janya	Charak Samhita	Sushruta Samhita.	Astang Hridaya	Madhav Nidan	Harit samhita
1	Pitri – matriki beeja dosha	-	-	-	-	+

TRIGGER FACTOR OF ASHMARI DUE TO FREQUENT NIDANAS SEVANA–

Walking in hot sun –Its cause concentrated urine and urine volume is also reduced. Thus ashmari is formed¹⁰.

Hot climate – It cause increase in concentration of solutes, which results in precipitation of calcium that forms the stones of calcium oxalate¹¹

Seetha , snigdha ,guru , madhura ahara sevana and diwaswapna – Excessive day sleep , sedentary life , increase kapha - leading to formation of ashmari. The predominant kapha get hard and grows in the form of ashmari. Vitiated shleshma enters into mutravaha srotas along with the mutra the ashmari is formed in urinary system. Kapha is samavayi kaarana of ashmari , because kapha possess prithwi tatwa in it , which helps in harding of ashmari. Here kapha refers to solutes present in the urine¹².Excessive intake of madhura , guru ,snigdha ahara such as milk , meat ,egg etc causes ashmari because such foods are kapha provoking as well as rich in calcium , phosphateetc hence ,they help in formation of ashmari.¹³

Urolithiasis occurs in various forms and at various site in body, most common sites are urinary tract and biliary tract. Urolithiasis means the presence of a calculus in the urinary system.

Urinary calculus is a stone like body composed of urinary salts bound together by a colloid matrix or organic materials; it consists of a nucleus around which concentric layers of urinary salts are deposited¹⁴.Urolithiasis is a multi –factorial disorder resulting from the combined influence of epidemiological, biochemical and genetic risk factor.

Aetiology – the following etiologies are as

–

The overall probability of forming stones differ in various parts of the world andis estimated about 1-5% in Aisa, 5-9% in Europe , 13 % in north America and the recurrence rate of renal stones about 75% in 20 years span¹⁵

Age – Urinary stones may occur in any age but it is more common in between the age of 30-50 years.

Sex – Male are more suffers than female. The male female ratio is 41:25(Finlayson 1974). In female , stone formation is less because of low serum testosterone levels , but children have most common oxalate stones .

Climate – Hotter areas are more prone to stone formation because of excessive perspiration and fluid loss due to atmospheric temperature which leads to concentrated urine and output may be diminished. In hot and humid climate stone are less common than in hot and dry climate. The seasonal



variation in dietary oxalate intake is also an important factor in the formation of stone.

Occupation : High socioeconomic group and sedentary workers are more prone to the disease. It has been found in a survey that inadequate physical activity and over saturation may be important factors contributing to the formation of many stones. Occupation like cooking , engine room person etc. may lead to high temperature , which leads to stone formation.

Diet – Highly rich protein diet , the exact cause and mechanism of stone formation in urinary system is still full of doubts but the following factors may be responsible for the stone formation viz.

Other factors for stone formation -¹⁶ Vit A deficiency, less water intake , inadequate urinary drainage , hyperparathyroidism (absorption of calcium increases), stasis

Risk factors –

Obesity – high body mass index and more weight gain have direct relation with increased risk of kidney stones

Dehydration – not drinking enough water and warm climates increase risk of kidney stones

Digestive diseases and surgery—certain surgery such as gastric bypass surgery and chronic diarrhoea affect absorption of calcium and increase more chance of stone formation.

Poorvaroop of ashmari-

Possess symptoms like avila mutrata (change in character of physic –cal urine i.e. turbidity) , sandra mutrata (concentrated urine) , bastigandhi mutra (goat like smelling urine) , basti , muska and asana desha soola (pain in the lower abdominal region) , mutra kricha (dysuria) , hematuria and burning sensation through urinary tract

तासांपूर्वरूपाणि-

ज्वरोबस्तिपीडारोचकौमूत्रकृच्छ्रंबस्तिशिरोमुष्कशेफसांवे

दनाकृच्छ्रावसादो

[२]

बस्तगन्धित्वंमूत्रस्येतियथास्ववेदनावर्णदुष्टसान्द्रमथा

विलम् । पूर्वरूपेऽश्मनःकृच्छ्रान्मूत्रंसृजतिमानवः

Table no – 5 Poorvaroop of ashmari according to different Acharyas

S.no	Poorvaroop	Charak Samhita	Sushruta Samhita.	Astang sangrah	Madhav Nidan	Bhav Prakash	Yog Ratnakar
1	Bastivedhna	+	+	+	+	+	+
2	Aruchi	+	+	+	+	+	+
3	Mutrakriccha	+	+	+	+	+	+
4	Bastisirovedana	+	-	+	-	-	-
5	Muskavedana	+	-	+	-	-	-
6	Shephavedana	+	-	-	-	-	-
7	Jwara	+	+	+	+	+	+
8	Avasada	+	-	-	-	-	-
9	Bastigandhatwa	+	+	+	+	+	+
10	Sandra mutra	+	-	-	-	-	-
11	Avila mutra	+	-	-	-	-	-
12	Basti adhma	-	+	+	+	+	+

Table no -6 Samanya Laxanas of Ashmari According to Different Acharyas–

S.no	Roopa	Sushruta samhita	Charak Samhita	Astang hridaya	Astang sangraha	Madhav nidaan	Bhav prakash	Yog ratnakar
1	Nabhivedana	+	-	+	+	+	+	+
2	Sevanivedana	+	+	+	+	+	+	+
3	Mehanavedana	+	+	-	-	-	-	-
4	Mutrardharasanga	+	-	-	+	-	-	-
5	Mutravikirana	+	-	-	-	-	-	-
6	Gomedaparakasha	+	-	+	+	+	+	+
7	Alyavilam	+	-	-	+	-	-	-
8	Sasiktam	+	-	-	+	+	+	+
9	Dhavana	+	-	-	+	-	-	-
10	Plavana	+	-	-	+	-	-	-
11	Vishirnadhara	-	+	+	-	-	-	-
12	Sarudhiramutrata	+	+	+	+	+	+	+
13	Mrudantimeda	-	-	-	-	-	-	-



14	Mutrarodha	-	+	+	-	+	+	+
15	Atimutram	-	-	-	-	+	-	-
16	Pratamroditi	-	-	-	-	-	-	-

Laxanas of updravas – Pain in pericardium , weakness of lower limb , pain in the flanks and shivering , thirst , blackish discoloration of body , dislike for food and indigestion , pale yellow appearance of body.

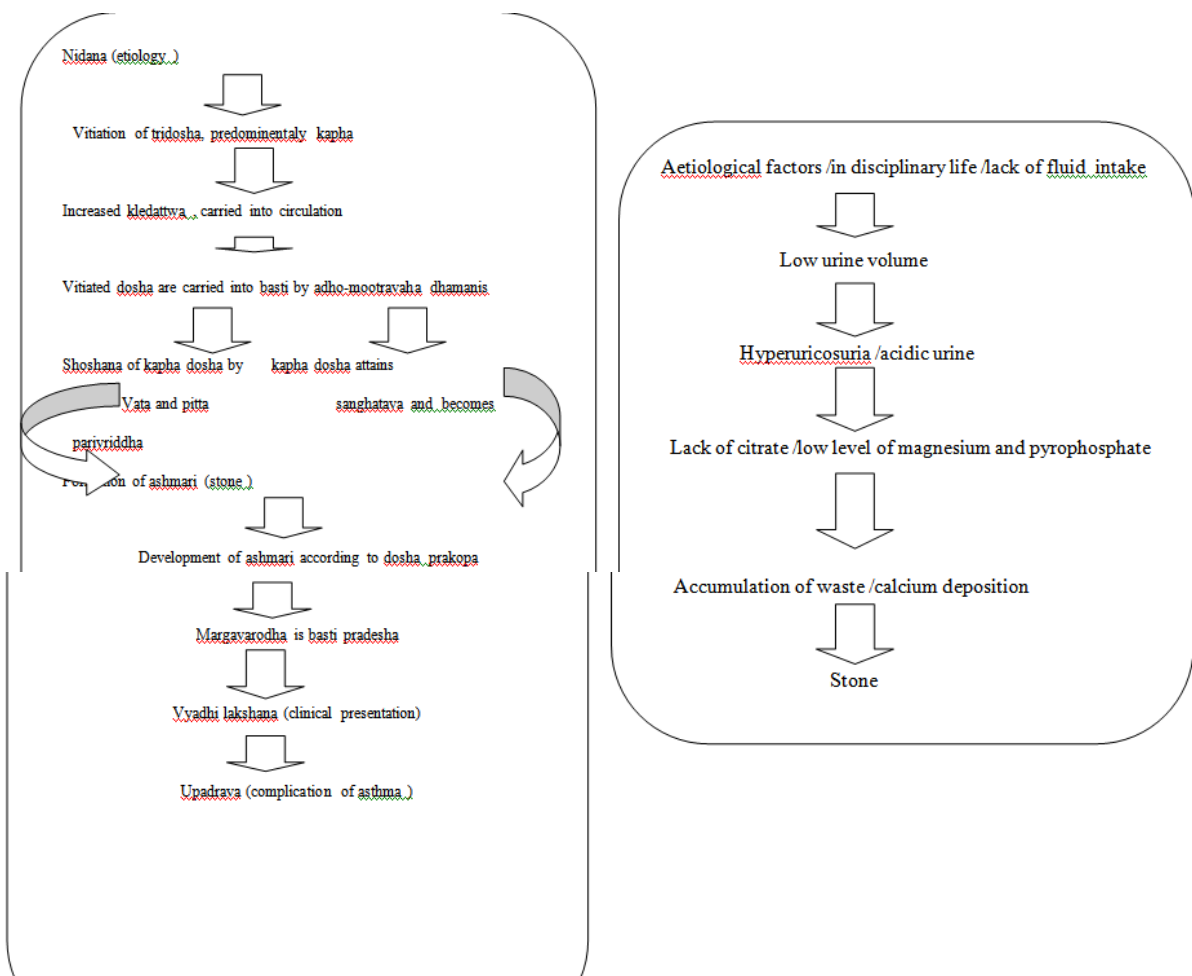
Samanyaswaroopa of ashmari – Ashmari looks like flowers of kadamba , slippery like stone , triputa in shape and soft to touch

Samprapti of ashmari (according to ayurveda)

Ashmari involve development of a calculus as a foreign body inside the urinary system ; kidney ,

ureter and bladder. Those people who are not undergo shodhana, in them shleshma dosha gets aggravated , which mixes with the urine and saturate it , saturation leads to stone formation¹⁸.

Mithya aahara vihar without shodhana –vata and kapha dosha morcchana – vitiation of shleshma – vitiated shleshma mixes with bastigatamootra – basti dusti turned to asmari- mootrashmari in mootravahasansthana



III. CLASSIFICATION-

All Acharyas except Charaka have classified the disease mutrashmari into four types i.e vataj ashmari , pittaj ashmari , shleshmika ashmari , shukraj ashmari. In modern classification of urinary calculi is calcium stone, struvite stones , uric acid stone and mixed stone. Acharya Charaka ,

chikista sthana 26/37 , has considered Mutrashmari as a variety under Mutrakrucho and classified it into Mridu Ashmari and Kathina Ashmari on the basis of consistency. Shukraja , pittaj and kaphaj varieties are the mridu where as vataj variety is kathina¹⁹.



Table no- 5

S.no	Ashmari	Su .s	Ch.s	Ah	As	mn	Bp	Yr	Modern
1	Sleshma ja	+	-	+	+	+	+	+	Oxalate calculus
2	Pittaja	+	-	+	+	+	+	+	Phosphate calculus
3	Vataja	+	-	+	+	+	+	+	Uric acid and urate calculi
4	Sukraja	+	-	+	+	+	+	+	Cystine calculus
5	Mridu	-	+	-	-	-	-	-	Xanthine calculus
6	Kathina	-	+	-	-	-	-	-	

IMPORTANT THERAPIES RECOMMENDED IN MOOTRASHMARI

Table no -6

S.no	Therapies	Effects
1	Shamana therapy	Administration of herbal drugs and herbal formulas offering analgesic , diuretic and lithotriptic properties , varuna ,gokshura , shilajitu ,veerataru, brihati, kantakari , yava , kshara , kushmanda, jasmine ,bakul , kantkari,punarnava and trapusa used in renal calculi
2	Shodhana therapy	Prepanchkarma ; external and internal oleation , sweating and panchakarma procedures. Saindhavadi taila niruha vasti and vrushadi asthapana vasti are recommended in renal calculi
3	Alkali therapy	Kshara act as diuretics , lithotriptic and alkalizer. Palasa kshara , yava kshara and mulaka kshara are used in such therapy
4	Vataashmari treatment	Decoction of following drugs ; vasuka , satavari , gokshura , bhrmhi , artagala , kubjaka, bhalluka and varuna destroys vatashmari
5	Pittaashmari treatment	Decoction of kusa , kasa , sara , satavari , pashana bheda , varahi , trikantaka , bhalluka ,patha and kuruntika
6	Sukraashmari treatment	Seminal concretions in urethra removed by the badisha instrument

ASHMARI PATHYA – APATHYA ACCORDING TO DIFFERENT ACHARYAS²⁰.

Table no -7

Pathya	Apathya
Yava Jala sevana Kulattha Godhuma Mudga Jeernashali Yavakshara Jeerna kushmada phala	Shuska ahara-ruksha ahara Pishtanna Arkatapa Athi vyayama Jambu Kapittha Kharjura Vegadharana



IV. DISCUSSION AND CONCLUSION

Mootraashmari is the stone formed in urinary tract, it's a problem that effecting to the people all around the world , diseased with more recurrence rate as the nidana parivarjana is a major treatment tool for any disease and if one obyes the pathyas ,no disease will occur and if one never mind them and continues apathyas , no treatment is needed, as it is not going to be cured. Ayurvedic medicine are the boon in prevention of recurrence, in management. Ayurveda acharayas mentioned detailed description about aetiology , types , pridominal symptoms , symptoms and signs and management of the ashmari. Mainly three types of medicine are given by the acharayas for management of ashmari i.e. mutra-virechaniya , ashmarighna dravya and kshara karma.

REFERENCE

- [1]. Vaidya Yadav Ji Trikamji Acharya Commentary on Dalhana Acharya Nibandhsangrah and Gaydas Nyaychandrikapanjika on Sushrut Chikitsa 7
- [2]. Dr Smith editorial general urology urinary stones
- [3]. Nephrolithiasis J Stuart Wolf Jr
- [4]. Sushruta , Sushruta Samhitaa Nidaana Sthaana 3/7, page 277 with Nibanda Sangraha of Dalhana and Nyayachandrika Panjika of Shri Gayadasa Commentary, edited by Vaidya Yadav Ji Trikamji Aachaarya, Chaukhamba Surbharati Prakashana , Varanasi , Reprint edition 2013
- [5]. Aruna , Essentials of Kaya Chikitsa . vol 2, 1st ed. Sushma Graphics;2008.p397
- [6]. Amarasinha Kritha Amarkosh ; with Ramasrani Commentary of Bhanuji- Diksita , edited with the easy maniprabha hindi commentary by Haragovinda Shastri ; Chaukhamba Sanskrit Samsthan , Varanasi ; Reprint edition ,2008
- [7]. Agnivesha , Charaka and Dridabala , Charaka Samhita Chikitsa Sthaana 26/32 , page 599 with Ayurveda Deepika Commentary of Chakrapani edited by Vaidya Yadavji Trikamji Acharya, Chaukhamba Surbharati Prakashana ,Varanasi , reprint edition 2011
- [8]. Sushruta , Sushruta Samhitaa Nidaana Sthaana 3/7, page 277 with Nibanda Sangraha of Dalhana and Nyayachandrika Panjika of Shri Gayadasa commentary, edited by Vaidya Yadav Ji Trikamji Aachaarya, Chaukhamba Surbharati Prakashana ,Varanasi , reprint edition 2013
- [9]. Astanga Hridayam ,Nidana Sthaana 9, page 498 , edited by Moreshwarkunte , Pandith Krishnasastry, Chaukhamba Samskrit Samsthan , Varanasi , reprint edition 2012.
- [10]. S.Kamalakar Puripanda, A Cross Sectional Survey To Analyze Mutrashmari Nidana , ISSN;2393-9583(P)/2393-9591(0)
- [11]. S.Kamalakar Puripanda, A Cross Sectional Survey To Analyze Mutrashmari Nidana , ISSN;2393-9583(P)/2393-9591(0)
- [12]. Sushruta , Sushruta Samhitaa Nidaana Sthaana 3/9, page 277 with Nibanda Sangraha of Dalhana and Nyayachandrika Panjika of Sri Gayadasa Commentary, edited by Vaidya Yadav Ji Trikamji Aachaarya, Chaukhamba Surbharati Prakashana ,Varanasi , Reprint edition 2013.
- [13]. S.Kamalakar Puripanda, A Cross Sectional Survey To Analyze Mutrashmari Nidana , ISSN;2393-9583(P)/2393-9591(0)
- [14]. Baskar , R., Malini , M.M., Varalakshmi,P., Balakrishna,K., and Bhimarao, R, 1996. Effect of Lupeol Isolated from C.Nurvala Stem Bark Against Free Radical Induced Toxicity In Experimental Urolithiasis . Fitoterapia , 67(2); 121-125
- [15]. Ganga Sahay Pandey .2006. Bhavprakashnighantu. Chaukhamba Bharti Academy ,641-642pp.
- [16]. www.pijar.org ISSN; 2456;4354
- [17]. Sushruta Samhita , Prof. K.R. Shrikantha Murthy , Vol-1 , Second edition-2004, Nidan Sthan , Chapter -3/4, Chaukhamba Orientalia , Varanasi, Up
- [18]. Agnivesha , Charaka Samhita , Elaborated By Charaka And Dradabala Edited – With Charak Chandrika Hindi Commentary By Brahmanand Tripathi , Reprint edition , Chaukhamba Subharati Prakashan, Varanasi , 2005
- [19]. Aruna .Essentials of Kaya Chikitsa , vol 2, 1st ed. Sushma Graphics ; 2008. P 401
- [20]. Mahanta Rabi Narayan , Panda P.K. A Conceptual Pathoclinical Study On The Disorder of Mutrabaha Srotas w.s.r to Mutrashmari (urolithiasis).INTJ.Ayur.Pharma Research 2014; 2(1); 30-39